

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Divisional Patent Application of

TERADA et al.

Atty. Ref.: 2018-505

Divisional of Serial No.: 09/625,403

Group Art Unit:

Filed: February 6, 2002

Examiner:

For: MEMORY WRITING DEVICE FOR AN ELECTRONIC DEVICE

February 6, 2002

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

Please enter the following amendments and consider the following
remarks prior to examination.

IN THE CLAIMS:

Please cancel claims 1-21 without prejudice or disclaimer.

Please add the following new claims.

--22. (New)A control unit comprising:

a volatile memory;

a nonvolatile memory storing a control program and control data
therein;

rewrite control program receiver for receiving a rewrite control program sent from an external device, the rewrite control program including a communication speed change section, including a communication speed change instruction, and a rewrite instruction section, and for storing the rewrite control program in the volatile memory; and

communication speed changer for, responsive to the communication speed change instruction received by the rewrite control program receiver, changing a data communication speed of data communication with the external device, which is used to send the rewrite instruction section from the external device.

23. (New)The control unit of claim 22, wherein:

the communication speed change section further includes a send speed instruction;

the communication speed changer is for, prior to changing the data communication speed, receiving the send speed instruction and sending a signal indicative of a current communication speed to the external device responsive to the send speed instruction.

24. (New)The control unit of claim 22, wherein:

the communication speed change instruction is provided preceding the rewrite instruction section in the rewrite control program sent from the external device.

25. (New)A control unit for a vehicle which rewrites vehicle control data through communication with a rewriting device, the control unit comprising:

a non-volatile memory for storing the vehicle control data therein; and

a processor for controlling a vehicle by using the control data stored in the non-volatile memory and for executing rewriting of the control data with new control data sent from the rewriting device;

wherein the processor is programmed to send a baud rate signal to the rewriting device when the rewriting device is detachably connected for control data rewriting, the baud rate signal being indicative of a predetermined baud rate of data communication supported by the control unit; and

wherein the processor is programmed to receive the new control data from the rewriting device at the predetermined baud rate and rewrites the vehicle control data stored in the non-volatile memory with the new control data.

26. (New)The control unit for a vehicle of claim 25, further comprising:

a volatile memory;

wherein the processor is further programmed to receive a rewrite control program from the rewriting device at the predetermined baud rate and store the rewrite control program in the volatile memory;

wherein the processor is further programmed to rewrite the vehicle control data of the non-volatile memory based on the rewrite control program stored in the volatile memory; and

wherein the vehicle control data and the new control data include a vehicle control program which the processor executes for controlling the vehicle.

27. (New)A rewriting device for a control unit which rewrites vehicle control data, the rewriting device comprising:

a memory storing new control data therein; and

a processor for controlling communication with the control unit;

wherein the processor is programmed to send a baud rate request signal to the control unit when detachably connected to the control unit, the baud rate request signal being for requesting information of a

predetermined baud rate of data communication supported by the control unit;

wherein the processor is programmed to set a baud rate in compliance with the predetermined baud rate replied from the control unit in response to the baud rate request signal; and

wherein the processor is programmed to send the new control data stored in the memory to the control unit at the predetermined baud rate.

28. (New)The rewriting device of claim 27, wherein:

the memory stores a rewrite control program which controls rewriting operation of the vehicle control data;

the vehicle control data and the new control data include a vehicle control program; and

the processor is programmed to send both the rewrite control program and the vehicle control program at the predetermined baud rate.

29. (New)The rewriting device of claim 28, wherein the rewrite control program includes baud rate information therein indicative of a baud rate at which the rewrite control program is sent.

30. (New)A method of communication between a control unit and an external device comprising:

sending, from an external device to a control unit, a request signal that requests information of a baud rate of data communication supported by the control unit;

sending, from the control unit to the external device, a reply signal indicative of the baud rate supported by the control unit in response to the request signal;

changing a baud rate of data communication of the external device in compliance with the baud rate indicated by the reply signal;

sending, from the external device to the control unit, a rewrite control program at a baud rate indicated by the reply signal;

storing the rewrite control program in a volatile memory of the control unit; and

executing the rewrite control program by the control unit to rewrite data stored in a non-volatile memory of the control unit with a new one sent from the external device.

31. (New)The method of communication as in claim 30, wherein the data rewritten in the non-volatile memory is a control program that is executed by the control unit for controlling vehicle operations.--

REMARKS

Please enter the amendments prior to examination. Currently, claims 22-31 are pending in this application.

If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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